

**WHAT IS CLAIMED IS:**

1        1. A method of maintaining extensible markup language (XML) documents comprising:  
2        splitting an XML document into fragments according to rules stored in a configuration  
3        file;  
4        binding each of the fragments to an object in a content management system; and  
5        providing a reference between the XML document and the fragments.

1        2. The method of claim 1 further comprising  
2        storing content associated with a fragment in the content management system.

1        3. The method of claim 2 further comprising  
2        associating the content with a particular object in the content management system.

1        4. The method of claim 3 further comprising  
2        replacing the content associated with each fragment with a link to the object in the  
3        content management system.

1        5. The method of claim 3 further comprising  
2        associating multiple fragments with a particular object in the content management  
3        system.

1        6. The method of claim 1 further comprising  
2        detecting an outgoing reference to a object attribute.

1        7. The method of claim 1 further comprising  
2        ensuring the reference is unique.

1        8. The method of claim 1 further comprising  
2        setting the rules according to an application.

1        9. The method of claim 1 wherein the rules include configuration rules.

1           10. The method of claim 1 wherein the rules include sub-rules.

1           11. The method of claim 1 wherein the rules include encoding rules.

1           12. The method of claim 9 wherein the configuration rules include a fragment rule that  
2 removes a fragment from the XML document and replaces the fragment with a reference.

1           13. The method of claim 9 wherein the configuration rules include an unparsed object  
2 rule that extracts a string associated with an unparsed object and replaces the string with a  
3 reference.

1           14. The method of 9 wherein the configuration rules include a hyperlink rule that  
2 replaces a link to another object attribute with a reference.

1           15. The method of claim 10 wherein the sub-rules include a pattern rule that extracts  
2 textual content from a fragment.

1           16. The method of claim 10 wherein the sub-rules include a attribute rule that assigns  
2 each object with an attribute type.

1           17. The method of claim 16 wherein the attribute type includes logical object (LOIO) or  
2 physical object (PHIO).

1           18. The method of claim 10 wherein the sub-rules include a class rule that provides a  
2 class name to an object.

1           19. The method of claim 11 wherein encoding rules include internal entity encoding  
2 rules.

1           20. The method of claim 11 wherein encoding rules include external name encoding  
2 rules.

1        21. The method of claim 11 wherein encoding rules include unparsed object encoding  
2 rules.

1        22. The method of claim 11 wherein encoding rules include hyperlink encoding rules.

1        23. The method of claim 1 wherein the fragment includes a sub-fragment.  
1 binding the sub-fragment to an object in a content management system; and  
2 providing a reference between the fragment and the sub-fragment.

1        24. A computer program product, tangibly embodied in an information carrier, for  
2 executing instructions on a processor, the computer program product being operable to cause  
3 a machine to:  
4 split an XML document into fragments according to rules stored in a configuration file;  
5 bind each of the fragments to an object in a content management system; and  
6 provide a reference between the XML document and the fragments.

1        25. The computer program product of claim 24 further configured to cause the machine  
2 to store the content associated with a fragment in the content management system.

1        26. The computer program product of claim 24 further configured to cause the machine  
2 to associate the content with a particular object in the content management system.

1        27. The computer program product of claim 24 further configured to cause the machine  
2 to replace the content associated with each fragment with a link to the object in the content  
3 management system.

1        28. The computer program product of claim 24 further configured to cause the machine  
2 to associate multiple fragments with a particular object in the content management system.

1        29. The computer program product of claim 24 wherein the fragment includes a sub-  
2 fragment and the computer program product is further configured to:  
3 bind the sub-fragment to an object in a content management system; and

4 provide a reference between the fragment and the sub-fragment.

1 30. A system comprising:

2 a means for splitting an XML document into fragments according to rules stored in a  
3 configuration file;

4 a means for binding each of the fragments to an object in a content management system;  
5 and

6 a means for providing a reference between the XML document and the fragments.

1 31. The system of claim 30 further comprising a means for storing the content associated  
2 with a fragment in the content management system.

1 32. The system of claim 30 further comprising a means for associating the content with a  
2 particular object in the content management system.

1 33. The system of claim 30 further comprising a means for replacing the content  
2 associated with each fragment with a link to the object in the content management system.

1 34. The system of claim 30 further comprising a means for associating multiple  
2 fragments with a particular object in the content management system.

1 35. The system of claim 30 further comprising:

2 a means for binding a sub-fragment to an object in a content management system; and  
3 a means for providing a reference between the fragment and the sub-fragment.

1 36. A method comprising the steps of:

2 a step of splitting an XML document into fragments according to rules stored in a  
3 configuration file;

4 a step of binding each of the fragments to an object in a content management system; and  
5 a step of providing a reference between the XML document and the fragments.

1        37. The method of claim 36 further comprising a step of storing the content associated  
2 with a fragment in the content management system.

1        38. The method of claim 36 further comprising a step of associating the content with a  
2 particular object in the content management system.

1        39. The method of claim 36 further comprising a step of replacing the content associated  
2 with each fragment with a link to the object in the content management system.

1        40. The method of claim 36 further comprising a step of associating multiple fragments  
2 with a particular object in the content management system.

1        41. The method of claim 36 further comprising:  
2 a step of binding a sub-fragment to an object in a content management system; and  
3 a step of providing a reference between the fragment and the sub-fragment.